	Inches.	Lines.
Transverse diameter of last lumbar vertebra	9	...
Ditto do. of body of ditto	2	2
Vertical diameter of ditto	1	3
Entire length of lumbar region of vertebral column	20	
Vertical diameter of glenoid cavity of scapula	3	...
Transverse ditto ditto ditto	2	10
Elevation of spine of scapula	3	5
Vertical diameter of proximal articular surface of fore-arm	3	6
Transverse ditto ditto ditto	3	5
Height of olecranon	5	3
Greatest diameter of its base	2	...
Circumference of proximal end of anchylosed radius and ulna	11	10
Entire length of inner toe of fore-foot, inclusive of metacarpal bone	13	...
Breadth of proximal end of metacarpus	3	8
Do. distal end of ditto	5	4
Length of inner metacarpal bone	7	6
Do. middle ditto	8	...
Do. outer ditto	7	...
Do. inner proximal phalanx	3	6
Do. middle ditto	2	10
Do. outer ditto	3	4
Do. inner middle phalanx	2	...
Do. middle ditto	2	3
Do. inner distal phalanx *	1	...
Do. the femur	24	...
Diameter of base of articular surface of the head of ditto	3	6
Greatest diameter of proximal end	7	...
Do. of distal end	6	3
Circumference of middle of shaft	8	...
Length of tibia	18	...
Greatest diameter of proximal end	5	7
Do. of distal end, including fibula	4	4
Circumference of middle of shaft	9	...
Length of metatarsal bone †	7	4

* The relative breadth of these bones is shown in the figures of the fore-foot, Pl. XI.

† The figures in Pl. XIV. preclude the necessity of giving the admeasurements of the astragalus.

ERRATA.—The reader is requested to substitute the word '*right*' for 'left' in the last line of p. 35, before the words 'radius,' 'fore-foot,' and 'femur,' and in the first line of p. 36, before the words 'tibia,' and 'hind-foot.'

DESCRIPTION OF A FRAGMENT OF A CRANIUM OF AN EXTINCT MAMMAL, INDICATIVE OF A NEW GENUS OF EDENTATA, AND FOR WHICH IS PROPOSED THE NAME OF

GLOSSOTHERIUM.

"LA première chose à faire dans l'étude d'un animal fossile, est de reconnaitre la forme de ses dents molaires; on détermine par-là s'il est carnivore ou herbivore;" says Cuvier, at the commencement of that series of splendid chapters in which the restoration of the extinct Pachyderms of the Paris Basin is recorded. In the present case, however, as in that of the Mammiferous animal whose fossil remains we were last considering, the important organs, to which Cuvier directs our first attention, are wanting. Nor are there here, as in the Macrauchenia, any remains of the locomotive extremities to compensate for the deficiency of teeth, and guide us into the right track of investigation and comparison. The animal, the nature and affinities of which are the subject of the following pages, is, in fact, represented in Mr. Darwin's collection, by nothing more than a fragment of the cranium.

This fragment, which was found in the bed of the same river, (see p. 16,) in Banda Oriental, with the cranium of the Toxodon, includes the parietes of the left side of the cerebral cavity, the corresponding nervous and vascular foramina, the left occipital condyle, a portion of the left zygomatic process, and, fortunately also, the left articular surface for the lower jaw. The importance of this surface in the determination of the affinities of a fossil animal has been duly appreciated, since the relations of the motions of the lower jaw to the kind of life of each animal were pointed out by Cuvier; but yet we should be deceived were we to establish, in conformity with the generalization enunciated by Cuvier,* our conclusion, from this surface, of the nature of the food of the extinct species under con-

* "Comme le genre de vie de chaque animal est toujours en rapport avec les mouvements dont sa mâchoire est susceptible, on retrouve dans la conformation des surfaces destinées à l'articulation, les particularités qui semblent le déterminer d'avance. Ainsi dans les animaux qui vivent de chairs, substances filamenteuses qui ne peuvent être écrasées, mais seulement coupées et dechirées, le mouvement de la mâchoire inférieure ne peut s'exécuter que de haut én bas. Dans les herbivores, les frugivores et les granivores, comme le principal mouvement est celui de broiement pour écraser, comprimer les herbes et les fruits, pour briser les grains et les réduire, en pâte, le mouvement des mâchoires se fait encore de droite à gauche, et réciproquement, on en même temps, de devant en arrière, en un mot, dans un plan horizontal autant que dans un vertical: les uns représentent des ciseaux, les autres des meules de moulin."